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[Section I: Top Ten Reportable Diseases in Missouri as of April 3, 2004*](#)

As of April 3, 2004 (Report Week #13), influenza and chronic hepatitis C were the two most common reportable diseases – **excluding sexually transmitted diseases** – in Missouri (**Table 1**). Giardiasis, salmonella, acute hepatitis C, and campylobacteriosis were the next most common diseases; with approximately one hundred reported cases each. These data were reported primarily through the MISSOURI HEALTH SURVEILLANCE INFORMATION SYSTEM (MOHSIS) and includes only confirmed and probable cases. However, due to changes in reporting requirements, 5-year median values may either be inaccurate or unavailable (see below).

Of the ten reportable diseases – **excluding sexually transmitted diseases** – with the highest number of confirmed or probable cases through April 3, 2004 (Report Week #13), all but two (i.e., giardiasis and shigellosis) exceeded the 5-year median value (**Table 1**). In comparison to the 5-year median value, the year-to-date number of cases of influenza, hepatitis C (both chronic and acute), hepatitis B (chronic and acute), and pertussis significantly increased. However, a portion of this increase may reflect improvements in reporting. Conversely, the year-to-date number of reported shigellosis cases significantly decreased.

** Data analysis in this section does not include sexually transmitted diseases. Additionally, all 2004 communicable disease data presented in this section are provisional.*

Section I: Top Ten Reportable Diseases - Continued

Table 1. Top Ten (by Count) Reportable Diseases and/or Conditions in Missouri – **excluding sexually transmitted diseases** – as of April 3, 2004 (Report Week #13).

Top Ten Disease/Conditions	Year-to-Date Count (2004)	5-Year Median Count (1999- 2003)	2004 as a Percent of the 5-Year Median	2004 Crude Rate per 100,000^a
Influenza	4,258	2,390	178	76.10
Hepatitis C, Chronic Infection ^b	744	401	186	13.30
Giardiasis	107	123	87	1.91
Salmonella Infections	105	84	125	1.88
Hepatitis C, Acute Infection	101	15	673	1.81
Campylobacteriosis	100	90	111	1.79
Hepatitis B, Acute Infection	74	38	195	1.32
Pertussis	46	14	329	0.82
Hepatitis B, Chronic Infection ^c	35	19	184	0.63
Shigellosis	24	65	37	0.43

a) Year to date crude rates calculated using 2000 U.S. Census data.

b) Prior to 2002, Hepatitis C, chronic infection was not reportable. As a result, the interpretive utility of the 5-year median value for chronic Hepatitis C is limited.

c) Hepatitis B, chronic infection did not become reportable until 2003. As a result, year-to-date data for 2003 was substituted for the 5-year median value.

Section II: In the Spotlight: Campylobacteriosis

The Epidemiology of Campylobacteriosis.^{1,2} Campylobacteriosis usually occurs in single, sporadic cases, but it can also occur in outbreaks, when a number of people become ill at one time. Most cases are associated with handling raw poultry or eating raw or undercooked poultry meat. Campylobacteriosis is not usually spread from person to person, but can be if the infected person is a small child or is producing a large volume of diarrhea. Larger outbreaks are not usually associated with raw poultry but are usually related to drinking unpasteurized milk or contaminated water. Animals can also be infected, and some people have been infected from contact with the infected stool of an ill dog or cat. To prevent campylobacteriosis:

- Cook all poultry products thoroughly.
- Wash hands with soap after handling raw foods of animal origin.
- Use separate cutting boards for foods of animal origin and other foods.
- Clean all surfaces and utensils with soap and hot water after preparing raw food of animal origin.
- Avoid consuming unpasteurized milk and untreated surface water.

Most people who become ill with campylobacteriosis get diarrhea, cramping, abdominal pain, and fever within 2 to 5 days after exposure. The diarrhea may be bloody and can be accompanied by nausea and vomiting. Illness typically lasts 1 week with a relapse in approximately 20% of cases. In persons with compromised immune systems, campylobacteriosis occasionally causes a serious life-threatening infection. *Campylobacter* is one of the most common bacterial causes of diarrheal illness in the United States; affecting over 1 million persons every year, or 0.5% of the general population. Campylobacteriosis occurs much more frequently in the summer months.

Diagnosis of *Campylobacter* requires special laboratory culture procedures, which doctors may need to specifically request. Virtually all persons infected with *Campylobacter* will recover without any specific treatment. Patients should drink plenty of fluids as long as the diarrhea lasts. In more severe cases, antibiotics may be used. Most people who get campylobacteriosis recover completely within 2 to 5 days. Antibiotics can shorten the duration of the illness and prevent relapse. However, it is estimated that approximately one in every 1,000 reported campylobacteriosis cases leads to Guillain-Barré syndrome. Guillain-Barré is a rare disease when a person's immune system is "triggered" to attack the body's own nerves, and can lead to paralysis that lasts several weeks and usually requires intensive care.

1. Department of Health and Human Services, Centers for Disease Control and Prevention, Division of Bacterial and Mycotic Diseases. Disease Information – Campylobacter Infections at http://www.cdc.gov/ncidod/dbmd/diseaseinfo/campylobacter_g.htm
2. Communicable Disease Investigation Reference Manual – Revised 7/03. Division of Environmental Health and Communicable Disease Prevention, Missouri Department of Health and Senior Services. Jefferson City, Mo. <http://www.dhss.mo.gov/CDManual/CDManual.htm>

Section II: In the Spotlight: Campylobacteriosis – Continued

Campylobacteriosis in Missouri – 2003. In 2003, there were 655 reported cases of confirmed and probable campylobacteriosis.³ Considering sex; 47.9% of cases were male, 51.9% female, and the remainder did not have a gender designation. Considering race; 58.8% were white, 3.8% black, 0.8% Asian, 0.2% Pacific Islander, and the remainder did not have a race designation. Finally, less than 1% indicated Hispanic ethnicity.

In 2003, the number of reported cases of campylobacteriosis was highest from May through September, peaking in June and July (**Table 2**). Approximately one-sixth of the cases occurred in children 0-4 years of age, while each group between the ages 5 and 64 had approximately 10 to 15% of the cases. Almost one-half of cases occurred in the Eastern Health Region, while approximately two-fifths occurred in the Southwest Health Region.

Table 2. 2002 Distribution of Reported Cases of Confirmed and Probable Campylobacteriosis; by Month, Age Group, and Health Region.

Month	<i>Percent of Cases</i>	Age Group	<i>Percent of Cases</i>	Health Region	<i>Percent of Cases</i>
January	3.3%	0-4	16.6%	Northwest	11.5%
February	3.8%	5-14	11.5%	Eastern	46.1%
March	6.0%	15-24	9.0%	Central	10.2%
April	5.7%	25-34	12.1%	Southeast	12.1%
May	10.9%	35-44	14.4%	Southwest	20.2%
June	14.7%	45-54	15.0%	Out-of-State	--
July	12.4%	55-64	10.1%	Unknown	--
August	9.9%	65-74	4.4%		
September	10.5%	75-84	4.4%		
October	8.4%	85+	1.1%		
November	8.7%	Unknown	1.5%		
December	5.7%				

-- Indicates no reported confirmed or probable case(s) in this socio-demographic category.

3. 2003 Annual Report: Bioterrorism, Communicable Disease, and Environmental Surveillance. Office of Surveillance, Division of Environmental Health and Communicable Disease Prevention, Missouri Department of Health and Senior Services. Jefferson City, Mo.
<http://www.dhss.mo.gov/CommunicableDisease/03Annual.pdf>

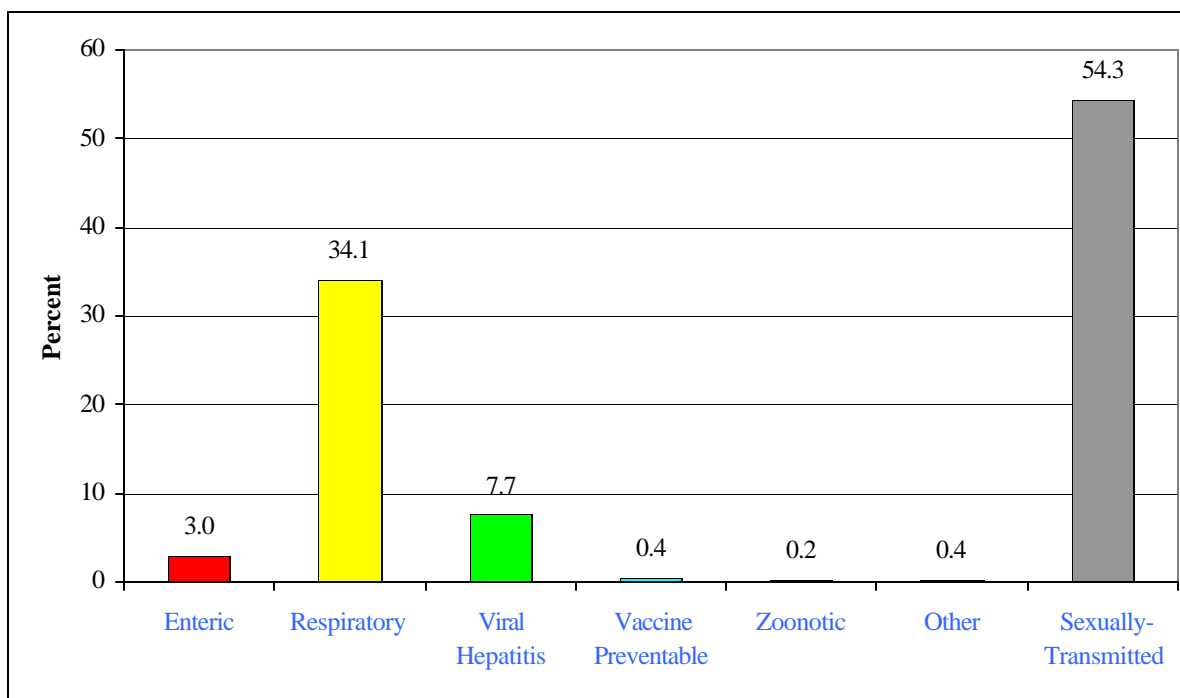
Section III: Distribution of Reported Cases, by Disease Category*

Excluding the 'Animal Bite' classification; sexually-transmitted diseases – **excluding HIV** – comprised the largest percentage of cases (55%) reported as of April 3, 2004 (Report Week #13)

(Figure 1).* Respiratory diseases comprised the largest percentage of cases (34%), followed by viral hepatitis (8%) and enteric (3%). The remaining disease categories (i.e., vaccine preventable, zoonotic, and other disease) comprised less than 1% each of the total number of reported cases.

**Data for sexually transmitted disease (STD) are through March 31, 2004. Additionally, all 2004 communicable disease data presented in this section are provisional.*

Figure 1. Percentage of Reportable Diseases and/or Conditions in Missouri – **excluding HIV** – as of April 3, 2004 (Report Week #13) – by Disease Category.*



Section IV: Links to other Communicable Disease Surveillance Unit Reports*

Other Communicable Disease Surveillance Unit Report

Report Title	Report Interval	Report Web Location
Summary of Notifiable Diseases In Missouri	annual	http://www.dhss.mo.gov/CommunicableDisease/Reports.html
Previous Communicable Disease Newsletters	monthly	http://www.dhss.mo.gov/CommunicableDisease/Reports.html
Rabies Surveillance	monthly	http://www.dhss.mo.gov/Rabies/index.html
HIV/STD Statistical Report	various	http://www.dhss.mo.gov/HIV_STD_AIDS/Data.html
Influenza Surveillance	weekly	http://www.dhss.mo.gov/Influenza/Reports.html

* For further information contact Office of Surveillance (573) 751-9071

Other Communicable Disease Resources

Resource Title	Resource Web Location
List of Diseases and Conditions Reportable in Missouri	http://www.dhss.mo.gov/CommunicableDisease/reportablediseaselist2.pdf
MDHSS Disease Case Report (CD- 1)	http://www.dhss.mo.gov/CDManual/CDappends.pdf
Communicable Disease Investigation Reference Manual	http://www.dhss.mo.gov/CDManual/CDManual.htm
Missouri Information for Community Assessment	http://www.dhss.mo.gov/MICA/nojava.html

Section III: Distribution of Reported Cases, by Disease Category:

Enteric

NUMBER OF REPORTED CASES AS OF APRIL 3, 2004	
<i>ENTERIC DISEASES</i>	
Acute Gastrointestinal Illness	2
Botulism, Infant	1
Campylobacteriosis	100
Cryptosporidiosis	14
Cyclosporiasis	2
Escherichia Coli O157 H7	3
Escherichia Coli Shiga Toxin	4
Escherichia Coli Shiga Toxin (not SG)	1
Giardiasis	107
Listeriosis	1
Salmonella	105
Shigellosis	24
Typhoid	1
Yersiniosis	7
TOTAL	372

Section III: Distribution of Reported Cases, by Disease Category:

Respiratory

NUMBER OF REPORTED CASES AS OF APRIL 3, 2004	
<i>RESPIRATORY DISEASES</i>	
Adult Respiratory Distress Syndrome	1
Coccidioidomycosis	1
Histoplasmosis	1
Influenza	4258
Legionellosis	4
Tuberculosis	21
TOTAL	4286

Section III: Distribution of Reported Cases, by Disease Category:

Viral Hepatitis

NUMBER OF REPORTED CASES AS OF APRIL 3, 2004	
<i>VIRAL HEPATITIS</i>	
Hepatitis A	11
Acute Hepatitis B	74
Chronic Hepatitis B	35
Perinatal Hepatitis B	1
Acute Hepatitis C	101
Chronic Hepatitis C	744
TOTAL	966

Section III: Distribution of Reported Cases, by Disease Category:

Vaccine Preventable

NUMBER OF REPORTED CASES AS OF APRIL 3, 2004	
<i>VACCINE PREVENTABLE DISEASES</i>	
Mumps	2
Pertussis	46
Rubella	1
TOTAL	49

Section III: Distribution of Reported Cases, by Disease Category:

Zoonotic

NUMBER OF REPORTED CASES AS OF APRIL 3, 2004	
<i>ZOONOTIC DISEASES</i>	
Ehrlichiosis HME	2
Lyme	10
Malaria	3
Q Fever	2
Rabies, animal	3
Rocky Mountain Spotted Fever	3
Tularemia	1
West Nile Virus Encephalitis/Meningitis	1
TOTAL	25

Section III: Distribution of Reported Cases, by Disease Category:

Other

NUMBER OF REPORTED CASES AS OF APRIL 3, 2004	
<i>OTHER DISEASES</i>	
Bacterial Meningitis, other	5
Haemophilus Influenzae	6
Meningitis, other (fungal)	1
Meningococcal Meningitis	5
Streptococcal Disease, invasive Group A	18
Streptococcal Pneumonia	6
other	5
TOTAL	46

Section III: Distribution of Reported Cases, by Disease Category:

Sexually-Transmitted

NUMBER OF REPORTED CASES AS OF MARCH 31, 2004	
<i>SEXUALLY-TRANSMITTED DISEASES</i>	
Chlamydia	4839
Gonorrhea	1954
Syphilis - Early	17
Syphilis - Latent, Late/Duration Unknown	27
Syphilis - Congenital	1
TOTAL	6838